

Beef Reader

Stories from
the Beef State

Have you ever wondered, “where did my hamburger come from?”

A hamburger is often made from beef, which is meat from a beef cow. A beef cow is raised on a farm or ranch. Beef cattle outnumber Nebraskans nearly four to one and represent Nebraska’s single largest industry. Taking care of cattle is more than just a job – it is a way of life. Working together, Nebraska’s farmers and ranchers start the process of providing a healthy option for your plate by committing to raising cattle in a safe way.

Many different resources - workers, research, land, and customers who enjoy beef – contribute to the beef industry. Read on to discover stories from the Beef State to find out how beef ends up on your plate!

The Many Faces of Beef

Beef producers are responsible for growing beef cattle into healthy, strong animals by providing for their basic needs such as food, water, and shelter. They can spend their days fixing fences, checking grass levels, and maintaining the health of their animals.



Daniel Hasart from Cherry County says that working in agriculture is not just a job, it’s a lifestyle. He says, “My job is making a difference. I am passionate about the land, livestock, and wildlife. We produce some of the best quality beef in the world.”

Dig Deeper

How do beef producers meet the basic needs of beef cattle?



Grant Jones from Chase County is a sixth generation rancher. He says, “I am motivated by the new challenge that I am faced with every day. No two days are ever the same on the ranch. I enjoy working to improve my cow herd with new technology.”



Hannah Klitz is from Cuming County. Her family has raised cattle for five generations. She says, “I care for the cattle the best I can to give them a good life. I raise cattle because I love taking care of the animals.”

Talk Like a Rancher

If you ever listen to a rancher talk, they have different names for their cattle. The names change depending on how old the cattle are and whether they are male or female. Let's take a closer look at how we determine what to call a beef animal and the different phases in their circle of life!



What's in a name?

We can use the words bovine or Bos Taurus to classify domesticated cattle in general. When we look more specifically at "beef cattle," we can call them a calf, heifer, cow, bull, or steer, depending on a few different factors.

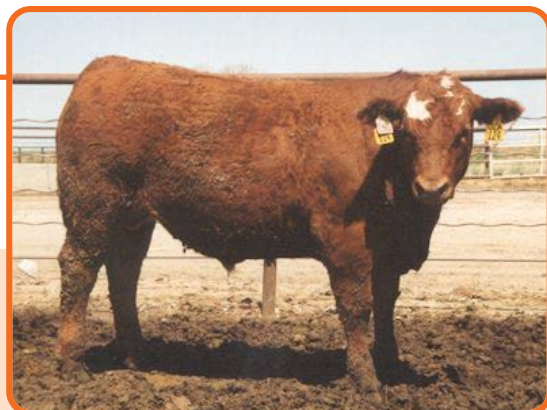
Bull – Adult male used for breeding

Cow – Adult female that has had babies

Steer – Male that cannot be used for breeding

Heifer – Young female that has not had babies yet

Calf – A male or female baby



Matching Time!

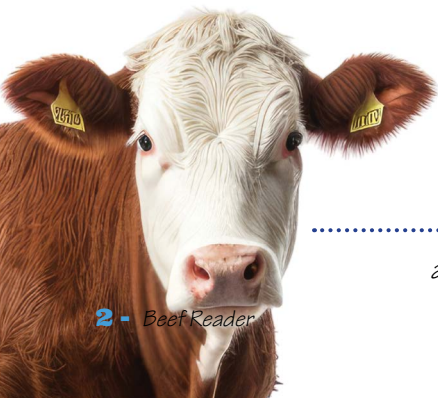
Can you tell which picture is which? Identify the animals with one of these terms: Cow, Calf, Bull, Steer.



Did You Know?

Beef cattle can be different colors! Just like there are breeds of dogs, there are breeds of cattle. The word breed refers to cattle with similar characteristics.

..... Hereford and Angus
are some of the breeds predominant on Nebraska ranches today.



From Farm To Fork

Did you know almost everything you eat started on a farm? Follow the adventure from farm to fork.

Stage 1 - The Farm

The farm is where the calves are born. The calves will live with the cows until they reach about 500-600 pounds. At this time, the calf is big enough to live on its own and is separated from the cow. This is called weaning. Some of the heifer calves will be kept on the farm to replace some of the older cows. These are called replacement heifers. The rest of the calves will be sold to a backgrounder.

Stage 2 - Backgrounders

At this stage the calves eat and grow for four to five months. If you see calves roaming in a pasture or in a field of harvested corn, they probably belong to a backgrounder. When the calves weigh around 800 pounds, they are then sold to a feedlot operator.

Stage 3 - Feedlot

At the feedlot calves are fed special food mixtures (rations) that help them grow large and muscular without becoming too fat. They usually spend four to five months at a feedlot. Cattle in the feedlot eat enough to gain three to four pounds each day. Once they reach 1,200 pounds, they are sold to a packer.

Stage 4 - Packer

The packer processes the cattle into delicious cuts of meat and other products. The packer then sells the meat to a retailer.

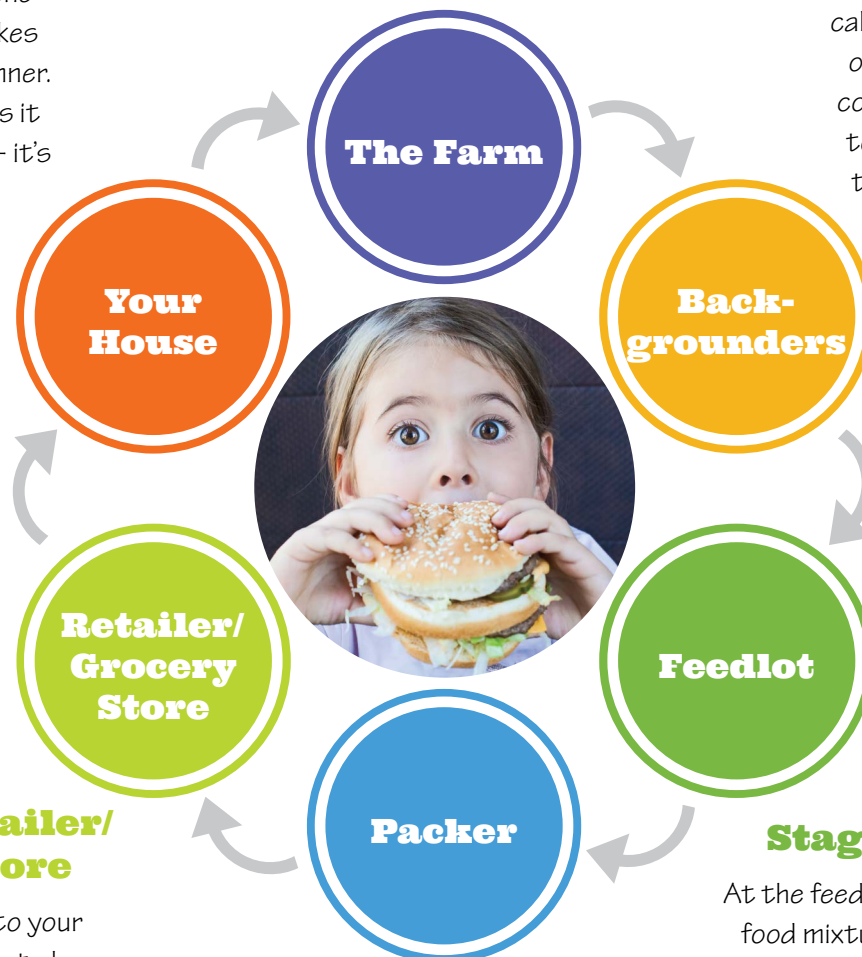
Stage 6 - Your House

Your family purchases beef products from the grocery store and takes them home for your dinner. This is how beef makes it onto your plate. Beef – it's what's for dinner!

Stage 5 - Retailer/ Grocery Store

Retailers sell food to your grocery store for you to buy. Retailers look for the freshest, best quality meats available.

Did you know the federal government inspects all meat that will be sold to ensure it meets food safety guidelines?



Beef in the Environment



Nebraska Was Made for Cattle

Our unique state has many acres of rangeland and pastureland where cattle graze. Half of these are in the Sandhills of Nebraska, where there are many more cattle than people. Nebraska farms also grow a lot of corn. About half of the corn grown in Nebraska is used to feed livestock. Once cattle go to feedlots, their diet is primarily corn mixed with some other grains and added nutrients. Some of the largest and busiest feedlots in the country are in Nebraska.

Maeghan Pieper works with her family at MJM Farms. MJM Farms is a family owned and operated feedlot, cow-calf, and row crop operation near Richland, NE. The Piepers grow corn, soybeans, and alfalfa and use a lot of it to make their own cattle feed. More than one billion bushels of corn are grown in Nebraska, and 40% of the crop is fed to the nearly five million head of cattle in Nebraska's feedlots each year.

Maeghan's family, who makes their living from the land, have a strong incentive to protect their animals and the environment. One thing Maeghan wishes more people knew is just how much feedlot operators care for the cattle.



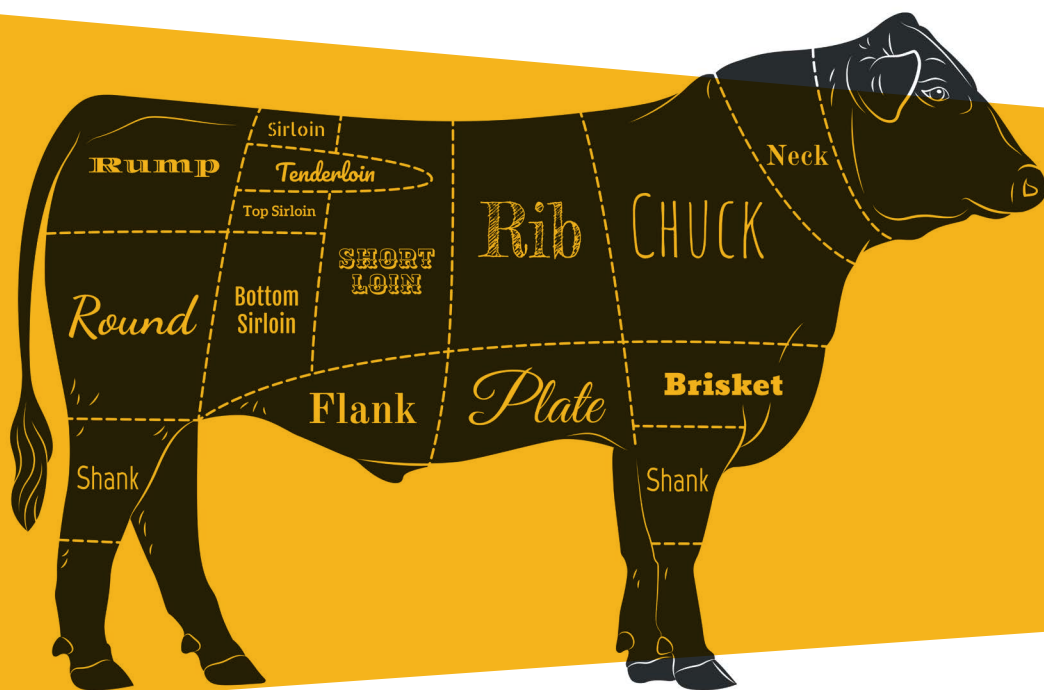
Caring for the Environment

While growing beef cattle into healthy and strong animals, ranchers also take good care of the land they own and ranch on. Cattle can recycle the grass of the Nebraska prairielands and Sandhills into protein for us to eat. Ranchers make sure the grass levels are plentiful for the cattle. They rotate cattle through different pastures at different times to manage the grass. Backgrounders often put cattle on corn stocks in the winter. Cattle can recycle the leftover plant material that would otherwise go to waste. Cattle can control pastures and fields by grazing. This makes sure that the fields are not overgrown or filled with weeds or invasive species.

Dig Deeper

Imagine you get to be your very own boss, with your own herd of cattle. Describe your ranch. Where is it located? What kind of cattle do you have and how many? Is it a ranch, feedlot, or both?





Did You Know?

One beef cow can provide more than 1,000 quarter pound hamburgers!



Packed for Your Plate

Beef is the word we use to describe the kind of meat that comes from the cattle we eat. The purpose of a beef cow is for people to eat their meat. Many people enjoy beef raised and processed right here in Nebraska! Whether you buy in bulk to fill your freezer or you are looking for tonight's dinner, you can find the right fit for you.

One beef cow provides an average of 430 pounds of meat! Different parts of a beef animal are used for different purposes. Some parts are used for steaks while others are ground for hamburger. A butcher, or meat processor, removes parts such as skin and bones to prepare the meat for your home. This person is trained in separating the meat into the cuts such as a ribeye, T-Bone, hamburger, and roasts!

Dig Deeper

What is your favorite type of beef?

CAREER HIGHLIGHT:

Meat Scientist

Meat scientists have spent a lot of time studying beef. They have found new cuts of meat and how to make the beef have more flavor.

Dr. Gary Sullivan is a meat scientist at the University of Nebraska-Lincoln. He became interested in meat science after taking a "Foods of Animal Origin" class as a freshman animal science student. Gary says, "I loved how meat science connected people to animals as food."

Now, as a meat scientist, Gary investigates the use of ingredients, processes, and packaging to improve the quality, shelf-life, and safety of processed meats. He also teaches meat science courses and laboratory sessions to help ignite a passion in more students to study meat science.



Navigating Nutrition

Beef Provides...

- **Essential Nutrients:** It's a great source of protein, iron, and zinc. All are necessary for building strong muscles and repairing them, too!
- **A Single Ingredient with Great Taste:** Beef provides protein without a long list of ingredients and no added sodium.
- **More Protein and Fewer Calories:** It takes many more servings and calories of other protein sources like peanut butter and black beans to provide the same amount of protein as a single serving of beef.
- **A Purpose for the Land:** Around 29% of the land in the U.S. is rangeland that is too rocky or steep for growing crops, but cattle can graze this land and convert the grass they eat to protein for people.

Maintaining a healthy lifestyle is important, and eating beef is a great place to start!

Dig Deeper

You meet someone in the grocery store who cannot decide what to have for dinner. What could you share with them to persuade them to have beef?

CAREER HIGHLIGHT:



Meet **Mitch Rippe**, Director of Nutrition and Outreach, Nebraska Beef Council

Growing up on a farm and being around livestock and crops, Mitch saw how both plants and animals grew, the nutrients and food they needed to thrive, and what

people can do to support them. With human nutrition, he found he could take a lot of those same things and apply them to his body and health. Now, he works with people to do the same for them: keep them healthy and happy.

Mitch says, "I get to use my knowledge of science and the human body to promote the positive nutrition beef provides as a food. I work with health professional like dietitians, doctors, and nurses to teach cooking classes to show how beef fits into a healthy diet. I also get to work with teachers and students on proper food safety and preparation techniques of beef."

Cheesy Sloppy Joe Beef Cups

Ingredients

- 1 lb ground beef
- 1 (8 oz) can refrigerated buttermilk biscuits
- 1 small onion, chopped
- 1-2 Tbsp. minced garlic
- 1/4 c. taco seasoning mix
- 1/2 c. water
- 1/2 c. canned sloppy joe sandwich sauce
- 1 c. shredded Mexican cheese blend
- Salt and pepper

Toppings

- Shredded lettuce
- Chopped tomato
- Shredded Mexican cheese blend
- Sour Cream
- Black olives

Total recipe time:

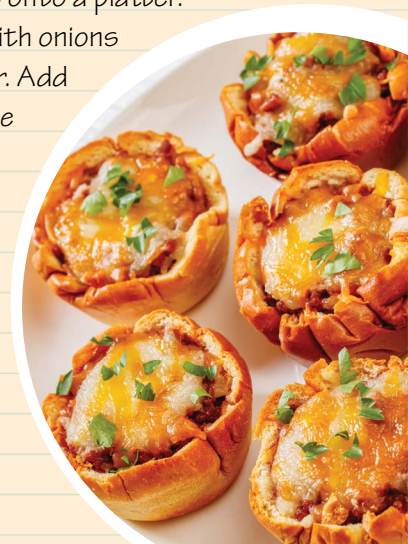
30 minutes

Servings:

8 taco cups

Instructions

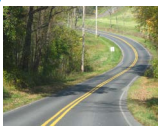
1. Heat oven to 350°F. Separate biscuits and press each into a 3 1/2" circle. Place over the underside of a standard-size muffin pan, pressing around cup to shape into bowl. Bake for 12-15 min. until browned. Remove baked cups onto a platter.
2. Meanwhile in a skillet brown the beef with onions and garlic; season with salt and pepper. Add in taco seasoning, water, and sloppy joe sauce; simmer for 6-7 min. or until hot and bubbly, stirring occasionally. Stir in 1 c. of cheese.
3. Spoon beef mixture evenly into cups. Top with lettuce, tomato, and more shredded cheese. Add other desired toppings.



More than the Moo

The soap, shampoo and conditioner you used in your hair, and the toothpaste you used all may contain a beef by-product. A by-product is a secondary product derived from a production process that has the primary goal of producing something else. While beef cattle serve the purpose of feeding people with their meat, they serve a secondary purpose of providing people with things such as cosmetics, medicine, and even clothing!

We use 99% of each beef animal. That way nothing goes to waste! Do you know that gelatins in products such as ice cream and yogurt are made from the hooves, horns, hide, and bones of the cow? People depend on cattle for ingredients in many food products, and much more.

A Adhesives 	B Balls 	C Crayons 	D Deodorant 	E Ear Chew 
F Floor Wax 	G Gums 	H Hair Shampoo 	I Insulin 	
J Jell-O 	K Kabobs 	L Lipstick 	M Mayonnaise 	N Nasal Spray 
O Outwear 	P Piano Keys 	Q Quarterpounder 	R Roads 	
S Steak 	T Toilet Paper 	U Umbrella Handle 	V Violin Strings 	W Wallet 
X X-Ray Film 	Y Yogurt 	Z Zinc Oxide 	Dig Deeper Identify FIVE items above that you have used this week. Describe what your life would be like without beef cattle.	

Trailblazing Ahead with Beef

Put your knowledge to the test! Fill in the blanks below using words from the word bank.

1. _____ and _____ are common breeds of beef cattle raised in Nebraska.
2. The average beef animal provides _____ pounds of meat for consumers.
3. A _____ is an adult male beef animal that is used for breeding.
4. _____ are where cattle are fed food mixtures (rations) that help them put on weight or grow muscle without putting on too much fat.
5. Many cattle are raised in the _____ of Nebraska, a geographical area which contains more than half of the state's pasturelands.
6. The Nebraska Beef Cattle Industry is the state's number _____ industry.
7. Around 29% of the land in the U.S. is _____ that is too rocky or steep for growing crops, but cattle can graze this land and convert the grass they eat to protein.
8. Beef is a major source of _____ and _____ in our diets and helps build and repair muscle.

Word Bank
Bull
Rangeland
Sandhills
One
Protein
Hereford
Feedlots
Iron
Angus
430

Excellent Job!

Now you are a
certified
"master of beef."

Beef It Up

- The Nebraska Beef Cattle Industry is the state's **#1 industry**.
- There are **23 million** acres of rangeland and pastureland in NE, which is mostly occupied by beef cattle.
- There are around **6.8 million** cattle in Nebraska and only **1.9 million** people.
- Nebraska has the top three beef cow counties in the U.S., including the nation's No. 1 cow county – Cherry County, with nearly **166,000 cows**.
- There are **4,570 cattle feeding** operations statewide.

Special thanks to these organizations for their support of this project:



Nebraska Agriculture in the Classroom is a program of the Nebraska Farm Bureau Foundation whose mission is to engage youth, educators, and the general public to promote an understanding of the vital importance of agriculture in the lives of all Nebraskans. To learn more or access an electronic version of this publication, visit us at www.nefbfoundation.org or contact the Nebraska Farm Bureau Foundation.

Dig Deeper

If you could tell someone one thing about beef, what would it be?

NEBRASKA
**AGRICULTURE
IN THE CLASSROOM**
NEBRASKA FARM BUREAU FOUNDATION